

**Community Advisory Council
December 13, 2012
Action Items/Notes**

Final

These notes are in the following order:

1. Attendance
2. Correspondence and Handouts
3. Administrative Items
4. CO₂ to fuels presentation
5. Agenda Setting
6. From Forest to Solar Farm: An Evolution of Habitat presentation
7. Community Comment
8. Membership issue – number of seats a member can fill

1. Attendance

Members/Alternates Present: See Attached Sheets.

Others Present: S. Bogart, J. Carter, R. Desmarais, N. Detweiler, M. Eisaman, L. Garber, T. Green, J. Higbie, S. Johnson, R. Lee, R. McKay, P. Paul, A. Rapiejko, J. Remien, T. Shiels

2. Correspondence and Handouts

Items numbered one and two were mailed to Members with a cover letter dated December 6, 2012. Items numbered three through five were available as handouts at the meeting.

1. Draft agenda for December 13, 2012
2. Invitation to Holiday party
3. Draft notes for October 11, 2012
4. Copy of *CO₂ to Fuels* presentation
5. Copy of *From Forest to Solar Farm: An Evolution of Habitat* presentation

3. Administrative Items

The meeting began at 7:01pm after the holiday party. Reed Hodgkin, facilitator, reviewed the ground rules and the agenda. Those in attendance introduced themselves.

Member Guthy said she read an article recently about the toxic impact of hydro-fracking on Long Island and asked if the Lab has any more information. Hodgkin said that could possibly be an agenda topic in the future. He said it is not a Lab issue; perhaps Member Esposito could be a part of that presentation.

Member Esposito said there is all fracking, all the time.

Detweiler, liaison to the CAC, apologized that no one from Laboratory management was available to attend the meeting because they are all at a meeting in Washington, DC. She then said beginning January 1, 2013, Laboratory Director Sam Aronson will return to the area of research and Doon Gibbs will be serving as interim Director. Detweiler reported that Member Blumer is being recognized as “Nature’s Noblewoman” by ABCO (Affiliated Brookhaven Civic Organizations) at a ceremony being held tomorrow. Detweiler said that the Community Relations Office at Brookhaven Lab is coordinating several outreach efforts to assist those affected by Superstorm Sandy. A “bucket brigade” was implemented which resulted in 140 five gallon buckets donated by Home Depot, filled with cleaning supplies by Lab employees and

then dropped off at several locations to assist in the cleanup efforts. The Lab “adopted” twelve families impacted by the storm through the Colonial Youth and Family Services Organization. Laboratory employees purchased food, gift cards, and Christmas gifts for each of those families. There has been an outpouring of support and employees have been extremely generous. The Lab also has implemented a vacation donation program for employees that have been affected and are in need of additional time off. Detweiler then introduced Tara Shiels, the newest member to the Community Relations Office.

Approval of Minutes

Hodgin asked for corrections, additions, or deletions to the October 11, 2012 draft notes. There were none. The notes were approved as written with none opposed and four abstentions. (Editor’s note: a typo was found and corrected on page one of the draft notes)

4. CO₂ to Fuels presentation, Matt Eisaman, Sustainable Energy Technologies Dept.

Matt Eisaman told the CAC about a research project he had been working on before he came to Brookhaven. The research involves a method for extracting dissolved CO₂ in the oceans using bipolar membrane electro dialysis. Eisaman described his research; he discussed extracting CO₂ from seawater, climate change mitigation and renewable liquid fuel. He talked about projected CO₂ concentrations, temperature increase, and the effect on our oceans. He spoke about reducing CO₂ emissions from all sectors and the possibilities for CO₂ capture from industry, the atmosphere, and seawater.

Member Giacomaro asked about the connection between CO₂ in the atmosphere and CO₂ in seawater.

Eisaman said as you remove the CO₂ from the ocean, the water then absorbs more from the atmosphere. The equilibrium on the water’s surface is relatively quick.

Member Esposito said 35 per cent of the CO₂ that is emitted into the air is now being deposited into the ocean.

Eisaman said that CO₂ in water increases its acidity.

Member Doroski asked for more information on the conversion of carbon dioxide into hydrocarbon fuels.

Eisaman said that is not his area of expertise; there are many ways it can be done.

5. Agenda Setting

Nora Detweiler, liaison to the CAC, said that next month Bill Dorsch will give a presentation on the Annual Groundwater Report. Michael Jensen, meteorologist, has been invited to give a presentation on global warming, and we will also have some environmental updates. We are looking to schedule a presentation and tour of the NSLS-II in February or March and a presentation on Natural Resource Management by Tim Green. She asked if there were any other topics of interest to the CAC.

Member Doroski asked for a presentation on quantum mechanics by a physicist.

Member Jordan-Sweet asked for an update on the budget in January or February.

Member Giacomaro asked for information on wind power.

Detweiler said she will be working with researchers’ schedules on getting those presentations ready.

Member Esposito asked if the presentations can only be given by BNL scientists. She knows of some engineers that work for wind companies who could possibly give a presentation on wind power.

Detweiler said we have had outsiders present before, we can consider it. She said she will contact Member Esposito through email to discuss the possibility.

6. From Forest to Solar Farm: An Evolution of Habitat presentation, Jennifer Higbie, Environmental Protection Division

Tim Green, BNL Natural Resource Manager, introduced Jennifer Higbie of the Environmental Protection Division, who is doing work for her Ph.D. by conducting research at the Long Island Solar Farm. Higbie spoke about the sustainability, the positive ecological impacts of the Solar Farm and how it has impacted the small mammals, birds, reptiles, amphibians, and deer in the area. She described the vegetation at the solar array, precipitation, soil, and discussed the anticipated results of the research study and the potential management implications.

Member Sicignano said that while the land was being cleared for the Long Island Solar Farm, he found two dead flying squirrels in his yard. He felt they were being displaced due to the construction.

Higbie said a three-year study was done on flying squirrels and found they only use a very small area so mostly likely the squirrels he found were not from the land clearing.

Member Sicignano asked what is done to keep the grass short so it doesn't grow up over the solar panels.

Higbie said the area was mowed two times this year. She then explained that the area was fenced to keep the deer out, but 12 small boxed openings were installed in various areas at the bottom of the fence to allow small animals to enter and exit the area.

Member Sicignano then asked why they did not leave the bottom rung of the fence a few inches off of the ground instead of installing boxes for small animals to get through.

Higbie said it was a condition of the Environmental Assessment.

Tim Green added that this is the first solar facility to have the box openings; the idea is that deer can fit under the fence, but not through the boxes.

Member Giacomaro commented that less land would be used if you were to go up instead of out when constructing a solar farm.

Higbie said her job is to study the impacts of this type of facility.

Green said it is not feasible to go up, because as you do, you create shade, so in the end you would have to use the same amount land. A lot of calculations were done to make sure the rows of panels were as close as possible to each other to minimize the amount of land being used.

Member Jordan-Sweet asked if deer have ever been seen inside the fenced area.

Higbie said when it was still under construction they did and also during the hurricane when a section of fence came down.

Member Garber said flying squirrels are very common, even though you don't see them. They are nocturnal.

Higbie agreed and said we have found them everywhere on Lab property. They are very abundant.

Member Henagan asked if the cameras are put inside or outside the fenced in area.

Higbie said for security purposes, they are inside only.

Member Guthy said she wished Member Blumer were here for this presentation.

Member Madigan said he will get the information to her.

7. Community Comment

There was no community comment.

8. Member Issue – number of seats a member can fill

Hodgin said the question being considered tonight is; “Can a person represent more than one position on the CAC?” He said the CAC Guidelines do not presently address this question.

After several minutes of discussion, it was decided that the CAC Guidelines will continue to remain silent on the issue. The statement; “A person may represent only one position at the table at a meeting” will be added to ensure one person, one vote. The amendment will be made and sent out to members for approval at the next meeting.

The meeting adjourned at 8:46 p.m.

Agenda Topics
February 10, 2011 Poll

Homeland Security – 9
Nanotechnology Developments & Standards – 7 (3/10/2011 - E. Mendez)
Science & Politics – 7
Overview of BNL Land Use Plan – 6
Sustainability – 6
Photovoltaics – 6 (3/10/2011 - E. Mendez and R. Lofaro)
PET/MRI Research – 6
LISF Tour Prior to Completion – 6 (11/18/11 – ribbon cutting)
Business/Lab Integration of New Technologies – 6 (4/14/11 – Walter Copan)
Nano Patterning – 5
Natural Resources Management Plan – 5 (12/8/11 – Tim Green)
Nuclear Non-Proliferation – 4 (3/8/12 – Carol Kessler)
Nuclear Safety – 4
Catalysis & Super Conducting Magnets – 3
Cosmology – 3
Accelerate Long Island (as information becomes available) - 3
Safety Progress – 2
CRADAS – 2
Radio Isotopes – 2
Nuclear Stewardship - 1
Technology Transfer – 0 (4/14/11 – W. Copan)

P = Present	2012	Affiliation	First Name	Last Name	Jan	Feb	Mar	Apr	May	June	July no mtg.	Aug no mtg.	Sep	Oct	Nov no mtg.	Dec
		Member	Don	Garber	P	P	P	P	P	P						P
		Alternate	Michael	Madigan	P		P	P	P					P		P
		Member	Margaret	Malloy	P	P	P			P			P			P
		Alternate														
		Member	Arnie	Peskin		P	P	P	P				P			P
		Alternate	Eena-Mai	Franz	P	P	P		P	P				P		P
		Member	Adrienne	Esposito	P	P	P	P	P				P			P
		Alternate														
		Member	Christine	Birben	P	P	P	P	P	P			P			P
		Alternate	Eric	Rehbein	P	P	P	P	P	P			P	P		P
		Member	Paul	Ziems						P			P			P
		Alternate	Jim	Meade												
		Member	Michael	Giacomaro	P	P	P		P					P		P
		Alternate	Bob	Feinman	P		P	P	P	P			P			P
		Member	Jean	Mannhaupt												
		Member	Ed	Kaplan			P						P	P		
		Alternate	Steve	Schwartz	P				P							
		Member	Mary Joan	Shea	P				P	P			P	P		
		Alternate	Scott	Carlin												
		Member	Scott	Krsnak	P	P		P	P					P		P
		Alternate														
		Member	Karen	Blumer	P		P		P					P		
		Alternate	Michael	Madigan						P			P			P
		Member	Greg	Bush	P		P									
		Alternate	Adam	Martin	P											
		Alternate	Bruce	Martin	P				P	P						
		Member	Jane	Corrarino		P			P							
		Alternate														
		Member	Iqbal	Chaudhry		P	P		P	P			P	P		
		Member	Richard	Amper												
		Alternate	Alexandra	Muller	P	P	P						P	P		

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		L.I. Progressive Coalition	Member	David	Sprintzen	P	P	P	P	P			P	P		P
		L.I. Progressive Coalition	Alternate													
		Lake Panamoka Civic Association (Biss - 04/02)	Member	Rita	Biss		P	P	P	P				P		P
		Lake Panamoka Civic Association (Grandal - 10/10)	Alternate	Bonita	Grandal		P			P	P			P		P
		Longwood Alliance	Member	Tom	Talbot			P	P	P	P			P	P	
		Longwood Alliance	Alternate	Kevin	Crowley											
		Longwood Central School Dist. (Castro -06/09)	Member	Maria	Castro		P									
		Longwood Central School Dist.	Alternate	Allan	Gerstenlauer											
		Mastic Park Civic Association (Sicignano – 6/12)	Member	John	Sicignano									P		P
		Mastic Park Civic Association	Alternate	Clara	McManus					P			P			
		NSLS User	Member	Jean	Jordan-Sweet		P	P	P	P	P			P	P	
		NSLS User (Ravel -02/11)	Alternate	Bruce	Ravel	P		P		P	P			P		P
		Ridge Civic Association	Member	Pat	Henagan		P	P	P		P			P	P	
		Ridge Civic Association	Alternate													
		Town of Brookhaven (Graves - 06/06)	Member	Anthony	Graves											
		Town of Brookhaven	Alternate													
		Town of Brookhaven, Senior Citizens Office	Member	James	Heil	P	P	P	P	P	P			P	P	
		Town of Brookhaven, Senior Citizens Office	Alternate													
		Town of Riverhead (Doroski - 04/11)	Member	Isidore	Doroski		P			P	P			P		P
		Town of Riverhead (Hulme - 04/11)	Alternate	Suzanne	Hulme	P	P	P						P		
		Wading River Civic Association	Member	Helga	Guthy	P	P	P	P	P				P	P	
		Wading River Civic Association	Alternate	Sid	Bail					P						